



**FTA PRESENTATION  
AT THE  
ILLINOIS DOT  
FALL PLANNING  
CONFERENCE**

**October, 2009**



# *The TIGGER Program*

**What It Is  
and  
What It's Intended to Do**



**T**ransit  
**I**ntermodal  
**G**reenhouse  
**G**as and  
**E**nergy  
**R**eduction  
Program



## **Program Overview**

**TIGGER** is:

- Part of the American Recovery and Reinvestment Act (ARRA) of 2009
- A New \$100M Discretionary Grant Program
- Established to Support Public Transit Agencies in Making Capital Investments that will Assist in Reducing the Energy Consumption or Greenhouse Gas Emissions of their Public Transportation Systems



## Proposals

- Proposals were due by May 22, 2009
- Each submitted proposal had to request a minimum of \$2,000,000
- Consolidated proposals from transit agencies to reach this \$2,000,000 were allowed
- Individual projects within a proposal could receive less than \$2,000,000
- To ensure a variety of projects are funded, FTA established a maximum grant amount of \$25,000,000



## **Proposal Requirements**

For each project, every proposal had to:

- Identify whether the project was to be evaluated under energy reduction, or greenhouse gas reduction criteria, or both criteria
- Describe the scope of the project, including the proposed capital investment, as well as the existing system, subsystem, facility, vehicle, or component that the investment will replace or be applied



## **Project Information**

### **Project Scope:**

- Determined where measurement of energy reductions or greenhouse gas emissions reductions will take place
- Had to be directly related to the actual capital investment
- Was determined in a manner that will permit measurement before and after the investment to determine either the energy savings or greenhouse gas reduction



## **Project Information (Cont'd)**

Examples:

- A project could consist of replacing 10 buses in a 100-vehicle bus fleet with more energy efficient buses. In this case, measurement would focus on the 10 vehicles, not the entire fleet.
- A project could consist of including wayside energy storage for a rail system to capture regenerated energy. In this case, the measurement could focus on the energy use of the rail lines where the investment takes place, not the entire rail system



## **Project Information (Cont'd)**

Examples (Cont'd):

- A project could consist of multiple investments (*e.g.*, compact fluorescents, solar panels) to reduce the energy use of a bus maintenance facility. In that case, the measurement could be the energy use of the entire facility.



## Project Information (Cont'd)

- A proposal had to provide narrative information for each project describing how the estimates provided in the summary tables were calculated.

Return on Investment – This included the ratio of energy savings or greenhouse gas reductions per dollar of Federal TIGGER funds invested.

Project Readiness - The project was ready to implement.

Project Management Capacity - The applicant demonstrated the capacity to carry out the project.



## Project Information (Cont'd)

- A proposal had to provide narrative information for each project describing how the estimates provided in the summary tables were calculated.

*Project Innovation* - The project identified a unique, significant, or innovative approach to reducing energy consumption or greenhouse gas emissions not currently in widespread practice within the transit industry, or an approach distinct from the other proposals received by FTA.

*National Applicability* - The national applicability of the project as an example of energy savings or greenhouse gas reductions including whether the project could be replicated by other transit agencies regionally or nationally.



## Projects Measured Under The Energy Consumption Reduction Focus of ARRA

### Total Project Energy Savings:

- Project's Current Annual Energy Use
- Project's Estimated Annual Energy Use
- Project's Annual Energy Savings
- Total Project Energy Savings



## **Projects Measured Under The Energy Consumption Reduction Focus of ARRA**

**Total Project Energy Savings as a Percentage of the  
Total of the Total Energy Use of the Public  
Transportation Agency:**

- *Reported Energy Consumption*
- *Non-reported Energy Consumption*
- *Total Energy Use of the Public Transportation Agency*
- *Estimated Total Project Energy Savings Divided By the Total Energy Use of the Public Transportation Agency*



# Projects To Be Evaluated Under Greenhouse Gas Reduction Focus of the ARRA

## Project's Total Estimated Greenhouse Gas Reduction:

- Project's Current Annual Greenhouse Gas Emissions
- Project's Estimated Annual Greenhouse Gas Emissions
- Project's Estimated Annual Greenhouse Gas Reduction
- Project's Estimated Total Greenhouse Gas Reduction



## **Summary of Accepted TIGGER Proposals in Illinois**

- **Champaign – Urbana MTD - \$450,000:** The CUMTD's transit facility's existing conventional heating and cooling system will be replaced with a geothermal system. Geothermal systems are highly effective with improved efficiencies over conventional systems, due to the heat exchange process with an underground source that maintains a near constant temperature.
- **Chicago Transit Authority - \$1,500,000:** The CTA will construct specialized stalls that will deliver electrical power to buses for heating or cooling during cleaning, so that the buses can be turned off while the they are being cleaned. Currently, they have to remain idling.



## **Summary of Accepted TIGER Proposals in Illinois**

- **Rock Island County MMTD - \$600,000:**  
MetroLINK will install a solar thermal hot water system for its operations and maintenance building.
- **Illinois Department of Transportation - \$4,000,000:**  
IDOT will purchase 31 hybrid paratransit vehicles to replace some of the gas and diesel vehicles in the fleets of seven transit systems. The systems are Champaign – Urbana, Rockford, St. Clair County, Rock Island, PACE (Suburban Chicago), and Bloomington – Normal.



# **Questions and Wrap Up**

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